



Ministry of the Environment

Hon. Keith C. Norton, Q.C., Minister

Gérard J. M. Raymond Deputy Minister

about pesticides

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ABATE, MALATHION, DURSBAN, ALTOSID, FENTHION, METHOXYCHLOR, PYRETHRINS - MOSQUITO LARVICIDES

 ${\rm LD}_{50}$ is an expression of relative acute toxicity. It is the amount of chemical necessary to kill 50 per cent of standard laboratory test animals and is measured in milligrams of toxicant per kilogram of body weight of an animal.

Technical Material	LD ₅₀ Oral	LD ₅₀ Dermal	Schedule Ontario Classification System
Abate	1,000 (rat)	4,000 (rat)	3
Dursban (chloropyrifos)	163 (rat)	1200 - 1600 (rabbit)	>25% Schedule 2 <25% Schedule 3
Malathion	1,375 (rat)	4,400 (rat)	>65% Schedule 2 <65% Schedule 3 <10% Schedule 4
Pyrethrins	1,800 (rat)	1,800 (rat)	> 1% Schedule 3 < 1% Schedule 4
Altosid (methoprene)	>34,600 (rat)	3,000-10,000 (rabbit	Schedule 2
Baytex (fenthion)	215	320	> 5% Schedule 2
Methoxychlor	6,000	>6,000	> 5% Schedule 3 < 5% Schedule 4

NOTES ON CHEMICALS:

- Abate, Malathion, Dursban and fenthion are organophosphate insecticides. They inhibit the cholinesterase enzyme (see symptoms of poisoning, page #41 Chemical Safety Handbook.)
- 2. Pyrethrins are toxic to fish. They have a low mammalian toxicity and have no residual effect.
- 3. Malathion should be applied between 65° 85° F. $(18^{\circ}$ 29° C).
- 4. Abate: take special note of the following statements on Abate labels:

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USE LIMITATIONS:

- Do not use on crops grown for food, forage or pasture, or allow spray drift to contaminate these crops.
- 2) Do not allow domestic animals to drink the water within 72 hours of treatment.

THIS PRODUCT IS TOXIC TO BIRDS AND BEES. It should not be applied when bees are in the area.

3) DURSBAN: take special note of the following statements on Dursban labels, and USE PRECAUTIONS:

Use this product only as directed on the label. Dursban is toxic to shrimp, crabs and fish. Do not apply to water containing valuable crustaceans and fish.

Do not apply to crop land.

Repeat application of Dursban as required no more often than every two weeks.

- 4) FENTHION: Note precautionary statement: allow three weeks between applications.
- 5) Methoxychlor is a chlorinated hydrocarbon. See symptoms of poisoning page #41 in Chemical Safety Handbook.
- 6) ALTOSID (methoprene): Note precautionary statement:

Do not use on food crops or land to be used for food crops.

Do not use in water which may be used for human or livestock drinking purposes. Remove all livestock during spraying.

Altosid controls 2nd to 4th instars in Aedes species only.

GRANULAR VS. LIQUID FORMULATION APPLIED TO WATER

Granules are easier to handle and apply and facilitate accurate placement of the material with very little drift. Granular formulations are preferable after foliage is out. The application of liquid formulations may result in burning of the foliage.